Journal of Medical Systems

Volume 27, Number 1 February 2003

CONTENTS

ARTICLES

An e-Learning Caregiving Program for Prostate Cancer Patients and Family Members 1
Janet Reis, Brendan McGinty, and Sandi Jones

Delivering Consumer Health Information Digitally: A Comparison Between the Web and Touchscreen Kiosk 13
David Nicholas, Paul Huntington, and Peter Williams

The Journey to e-Health: VA Healthcare Network Upstate New York (VISN 2) 35
Kim M. Nazi

The Power of Collaboration: Using Internet-Based Tools to Facilitate Networking and Benchmarking Within a Consortium of Academic Health Centers 47
Eli J. Korner, Michael J. Oinonen, and Robert C. Browne

Internet Pharmacy: Issues of Access, Quality, Costs, and Regulation 57
Stephanie Y. Crawford

The Impact of CyberHealthcare on the Physician–Patient Relationship 67
James G. Anderson, Michelle R. Rainey, and Gunther Eysenbach

Virtual Integrated Practice: Integrating Teams and Technology to Manage Chronic Disease in Primary Care 85
Steven K. Rothschild and Stanley Lapidos

What It Will Take to Create New Internet Initiatives in Health Care 95
Rosemary Walker, Michael Dieter, Walter Panko, and Annette Valenta

Journal of Medical Systems

Volume 27, Number 2 April 2003

CONTENTS

ARTICLES

Determination of Stenosis and Occlusion in Arteries With the Application of FFT, AR, and ARMA Methods 105
Elif Derya Übeyli and İnan Güler

Determination of Coronary Failure With the Application of FFT and AR Methods 121
Selami Serhatlioğlu, Oktay Burma, Fırat Hardalaç, İnan Güler

Development of an Emergency Medical Video Multiplexing Transport System 133
Hideaki Nagatuma

Evaluation of a Semiautomatic 3D Fusion Technique Applied to Molecular Imaging and MRI Brain/Frame Volume Data Sets 141
R. J. T. Gorniak, E. L. Kramer, G. Q. Maguire Jr., M. E. Noz, C. J. Schettino, and M. P. Zeleznik

Low-Cost Instrumentation for the Diagnosis of Hirschsprung's Disease 157
Sadık Kara, Duygu İstek, and Mustafa Okandan

Data Security Issues Arising From Integration of Wireless Access Into Healthcare Networks 163
John C. Frenzel

Aggregate Health Status: A Benchmark Index for Community Health 177
James F. Reed III, James N. Burdine, and Michael Felix

The Effects of Preparatory Sensory Information on ICU Patients 191
Shu-Feng Shi, Barbara A. Munjas, Thomas T. H. Wan, W. Richard Cowling III, Mary Jo Grap, Bill B. L. Wang

Classification of Transcranial Doppler Signals Using Artificial Neural Network 205
Selami Serhatlioğlu, Fırat Hardalaç, and İnan Güler

Survey of Fuzzy Logic Applications in Brain-Related Researches 215
Omer Faruk Bay, and Ali Bülent Usakli

Journal of Medical Systems

Volume 27, Number 3 June 2003

CONTENTS

ARTICLES

Development of an Emergency Medical Video Multiplexing Transport System (EMTS): Aiming at the Nation-Wide Prehospital Care in Ambulance 225
Hideaki Nagatuma

Methodological and Statistical Techniques: What Do Residents Really Need to Know About Statistics? 233
James F. Reed III, Philip Salen, and Pooneh Bagher

Developing an Appropriate EPR System for the Greek Primary Care Setting 239
Dimitris K. Kounalakis, Christos Lionis, Inge Okkes, and Henk Lamberts

A Web-Based Patient Information System—Identification of Patients' Information Needs 247
Linda Hassling, Ankica Babic, Urban Lönn, and Henrik Casimir-Ahn

A Hierarchical Multiple Criteria Mathematical Programming Approach for Scheduling General Surgery Operations in Large Hospitals 259
S. Noyan Ogulata and Rızvan Erol

Similar Cases Retrieval From the Database of Laboratory Test Results 271
Zhenjun Yang, Yasushi Matsumura, Shigeki Kuwata, Hideo Kusuoka, and Hiroshi Takeda

Nursing Care Quality in Nursing Homes: Cross-Sectional Versus Longitudinal Analysis 283
Thomas T. H. Wan

Journal of Medical Systems

Volume 27, Number 4 August 2003

CONTENTS

ARTICLES

Human Errors in Medical Practice: Systematic Classification and Reduction With Automated Information Systems 297
D. Kopec, M. H. Kabir, D. Reinharth, O. Rothschild, and J. C. Castiglione

Measuring the Performance of Neonatal Care Units in Scotland 315
Kamal Field and Ali Emrouznejad

Specifying Workflow Process Requirements for an Emergency Medical Service 325
M. Poulymenopoulou, F. Malamateniou, and G. Vassilacopoulos

Sleep Depth Oscillations: An Aspect to Consider in Automatic Sleep Analysis 337
Eero Huupponen, Sari-Leena Himanen, Joel Hasan, and Alpo Värri

A Review of Decision Support Systems in Telecare 347
Tasos Falas, George Papadopoulos, and Andreas Stafylopatis

The Latest MML (Medical Markup Language) Version 2.3—XML-Based Standard for Medical Data Exchange/Storage 357
Jinqiu Guo, Kenji Araki, Koji Tanaka, Junzo Sato, Muneou Suzuki, Akira Takada, Toshiaki Suzuki, Yusei Nakashima, and Hiroyuki Yoshihara

Evaluation of an Infrared/Radiofrequency Equipment-Tracking System in a Tertiary Care Hospital 367
Truls Østbye, David F. Lobach, Dianne Cheesborough, Ann Marie M. Lee, Katrina M. Krause, Vic Hasselblad, and Darryl Bright

Electromagnetic Noise Superimposed on the Electric Power Supply to Electronic Medical Equipment 381
Eisuke Hanada, Kyoko Takano, Kenji Kodama

Computer-Aided Planned Maintenance System for Medical Equipments 393
Serdar Müldür

Journal of Medical Systems

Volume 27, Number 5 October 2003

CONTENTS

ARTICLES

Introducing a Conceptual Information Retrieval (IR) Framework 399
Yuri Kagolovsky and Jochen R. Moehr

A New Look at Information Retrieval Evaluation: Proposal for Solutions 413
Y. Kagolovsky and J. R. Moehr

Measuring Disparities in Information Capture Timeliness Across Healthcare Settings: Effects on Data Quality 427
Daniel Lorence

Regional Variation in Medical Classification Agreement: Benchmarking the Coding Gap 437
Daniel Lorence

Evaluation of Performance of Dental Providers on Posterior Restorations: Does Experience Matter? A Data Envelopment Analysis (DEA) Approach 447
M. Nicholas Coppola, Yasar A. Ozcan, and Russell Bogacki

Neurofuzzy Classification of the Effect of Diabetes Mellitus on Carotid Artery 459
Selami Serhatlioglu, Zulkif Bozgeyik, Yusuf Ozkan, Firat Hardalac, and İnan Güler

A Theory for Classification of Health Care Organizations in the New Economy 467
Vivian Vimarlund, Cecilia Sjöberg, and Toomas Timpka

Sphincter Muscle Stimulator to be Used Before Treating Anal Atresia 477
Sadık Kara and Mustafa Okandan

A Multiagent Architecture for Developing Medical Information Retrieval Agents 481
Steven Walczak

Journal of Medical Systems

Volume 27, Number 6 December 2003

CONTENTS

Special Issue Part I: Systems Approaches to Safe Medication Use

Guest Editors: Ross M. Mullner and Stephanie Y. Crawford

ARTICLES

Patient Safety and Medication Errors 499
Ross M. Mullner

A Patient Empowerment Model to Prevent Medication Errors 503
Clara Awé and Swu-Jane Lin

"Risk, Respect, Responsibility": Educational Strategies to Promote Safe Medicine Use 519
N. Lee Rucker

Penetration of Medication Safety Technology in Community Hospitals 531
Glen T. Schumock, Vinit P. Nair, Jamie M. Finley, and Richard K. Lewis

Systems Factors in the Reporting of Serious Medication Errors in Hospitals 543
Stephanie Y. Crawford, Michael R. Cohen, and Eskinder Tafesse

Toward Efficient Medication Error Reduction: Error-Reducing Information Management Systems 553
Kyusuk Chung, Young B. Choi, and Sangho Moon